

## UNITED STATE DEPARTMENT OF COMMERCE Patent and Trademark Office

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SERIAL NUMBER FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 07/769,986 09/30/91 VERCELLOTTI 56.294 EXAMINER MULLEN, T WESTINGHOUSE ELECTRIC CORP. PAPER NUMBER ART UNIT CHURCHILL SITE - LAW DEPT. INTELLECTUAL PROP. SECTION PITTSBURGH, PA 15235 2608 DATE MAILED: 07/07/92 This is a communication from the examiner in charge of your application. COMMISSIONER OF PATENTS AND TRADEMARKS This application has been examined Responsive to communication filed on \_ month(s), days from the date of this letter. A shortened statutory period for response to this action is set to expire... Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133 THE FOLLOWING ATTACHMENT(8) ARE PART OF THIS ACTION: 1. Notice of References Cited by Examiner, PTO-892. 2. Notice re Patent Drawing, PTO-948. Notice of Art Cited by Applicant, PTO-1449. 4. Notice of informal Patent Application, Form PTO-152. 5. Information on How to Effect Drawing Changes, PTO-1474. 6. 🗆 **SUMMARY OF ACTION** are pending in the application. Of the above, claims 2. Claims 3. Claims 5. Claims 6. Ciaims ... are subject to restriction or election requirement. 7. 

This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes. 8. Formal drawings are required in response to this Office action. 9. The corrected or substitute drawings have been received on \_\_\_ . Under 37 C.F.R. 1.84 these drawings are acceptable. not acceptable (see explanation or Notice re Patent Drawing, PTO-948). 10.  $\Box$  The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_\_ has (have) been  $\Box$  approved by the examiner.  $\square$  disapproved by the examiner (see explanation). 11. The proposed drawing correction, filed on \_\_\_\_\_\_\_\_, has been approved. disapproved (see explanation). 12. Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has. Deen received not been received been flied in parent application, serial no. \_\_\_\_\_\_; filed on 13.  $\Box$  Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. 14. Other

**EXAMINER'S ACTION** 

1. The drawings are objected to under 37 C.F.R. § 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the electronic identification tag interrogation system of claims 1-13, including all of the elements recited therein, must be shown or the feature cancelled from the claim. No new matter should be entered.

- 2. Applicant is required to submit a proposed drawing correction in response to this Office action. However, correction of the noted defect can be deferred until the application is allowed by the examiner.
- 3. The disclosure is objected to because of the following informalities: on page 12, lines 2 and 4-6, "bag(s)" should be "tag(s)". Appropriate correction is required.
- 4. Claims 1-18 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 17, "directly searching" is vague. In claim 2, line 8, claim 3, line 9 and claim 15, line 4, "tag" should be plural. In claim 4, line 5, "means for communicating directly" is vague and indefinite, particularly where such means appear to be inherent in claim 1. In claim 5, line 5, after "identification" should be "tag". In claim 7, line 2 and claim 10, line 2, "further" should be deleted. On the last 3 lines of claim 8, the

two "said means..." recited therein lack antecedent basis (note claims 2-3). In claims 10-11, the recitation of separate means for detecting "presence" and "absence" is indefinite since one means will inherently detect both (by Virtue of a signal being either ON or OFF, etc.) In claim 13, line 4, "electric" should be "electronic".

In claim 14, where "at least one" tag includes the possibility of exactly one tag, the "bisecting" step recited on lines 8-10 is indefinite since no bisecting would occur if there were only one tag initially. In claim 17, the timewise relationship between the step recited therein and the step recited in preceding claim 16 is indefinite; the following language is suggested (on line 2 after "tag"): "when shifted to a lower power mode and having detected an absence of an interrogation signal, periodically detects the presence of an interrogation signal".

- 5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:
  - A person shall be entitled to a patent unless -(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1-2, 4, 12 and 14-15 are rejected under 35 U.S.C. § 102(b) as being anticipated by Barrett.

Barrett, cited by applicants, discloses apparatus and a

method for interrogating and identifying tags (see Abstract), comprising at least one portal having transmitter means (Fig. 3) for providing an RF interrogation signal (col. 4, line 40) and receiver means (Fig. 4) for responding to an RF tag signal having identifying data (col. 5, line 51 to col. 6, line 2) within a desired address range encoded therein; at least one electronic identification tag (Figs. 2 and 5) having supply means (col. 7, line 45) for powering the tag, memory means for storing the identifying data of the tag, RF receiver (60, 61) and transmitter (60, 107) means for processing incoming encoded RF signals and transmitting identifying data, respectively, if the tag is within the desired address range, and a discrete identification number (Fig. 7); and "interrogation" means (e.g. 309, Fig. 4) for "searching" the identification number of the tag. The receiver means (Fig. 4) "acknowledges" receipt of a tag response by processing such response, and further replies by the tag are "suppressed" by virtue of the synchronizing of responses by different tags. The synchronizing further "delays" the response of a given tag, and effectively "bisects" the desired address range until only one tag (at a time) responds.

7. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that

the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

8. Claim 13 is rejected under 35 U.S.C. § 103 as being unpatentable over Barrett.

Barrett teaches all the subject matter claimed, note paragraph 6 above, except for specifying eight time slots for tag response. Note that Barrett teaches using 32 such time slots (col. 6, lines 2-3).

To designate a number of different time slots for tag
response would have been a matter of obvious design choice, since
one of ordinary skill would have taken into account the number of
tags that may potentially be in the portal area at a given time
due to e.g. the size of an entryway adjacent the portal;
therefore it would have been obvious to select eight time slots
for Barrett rather than 32 depending on the particular
application of the system, as in claim 13.

9. Claims 3, 5-11 and 16-18 would be allowable if rewritten to overcome the rejection under 35 U.S.C. § 112 and to include all of the limitations of the base claim and any intervening claims.

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10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Matsui et al. is cited to further show the state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tom Mullen whose telephone number is (703) 308-4382.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-4750.

Thomas J. Mullen J. THOMAS I MULLEN, IR. AU 26.0-8

TM/DB June 17, 1992 June 26, 1992